

## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6: A47G 7/08, B65D 85/50

A1

(11) International Publication Number:

WO 99/55206

(43) International Publication Date:

MC, NL, PT, SE).

4 November 1999 (04.11.99)

(21) International Application Number:

PCT/US99/08242

(22) International Filing Date:

14 April 1999 (14.04.99)

(30) Priority Data:

09/067,498

27 April 1998 (27.04.98)

Published US

With international search report.

(81) Designated States: BR, CA, MX, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU.

(71) Applicant (for all designated States except US): SOUTHPAC TRUST INTERNATIONAL, INC. [CK/CK]; Centrepoint, 2nd floor, Rarotonga (CK).

(72) Inventor; and

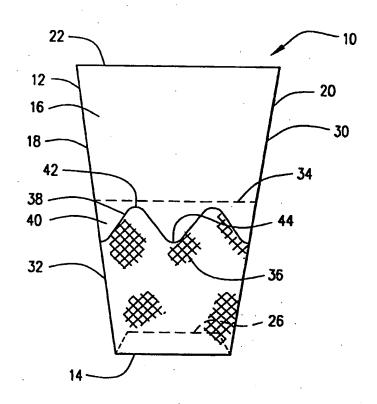
(75) Inventor/Applicant (for US only): WEDER, Donald, E. [US/US]; 1111 Sixth Street, Highland, IL 62249 (US).

(74) Agents: BERG, Richard, P. et al.; Ladas & Parry, Suite 2100, 5670 Wilshire Boulevard, Los Angeles, CA 90036-5679 (US).

(54) Title: FLORAL SLEEVE HAVING A DECORATIVE PATTERN

#### (57) Abstract

A plant packaging and covering system comprising a floral sleeve (10) having a base portion (32) having a decorative pattern (36) thereon. The sleeve (10) may have an upper sleeve portion (30) which can surround a plant disposed in a pot and which can be detached once the protective function of the sleeve (10) is complete or which can be used to support the sleeve (10) from a support device prior to use. The decorative pattern (36) has a curved or non-linear upper boundary (38) which gives the sleeve (10) the appearance of having a curved or non-linear upper skirt extending from the base portion (32).



BEST AVAILABLE COPY

## FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

Al	L Albania	ES	Spain	LS	Lesotho	SI	Slovenia
A	M Armenia	FI	Finland	LT	Lithuania .	SK	Slovakia
A٦	Γ Austria	FR	France	LU	Luxembourg	SN	Senegal
Al	U Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
A2	Z Azerbaijan	GB	United Kingdom	MC	Мопасо	TD	Chad
BA	A Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BI	B Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BI	E Belgium	GN ·	Guinea	MK	The former Yugoslav	TM	Turkmenistan
BF	F Burkina Faso	GR	Greece		Republic of Macedonia	TR	Turkey
В	G Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	J Benin	ΙE	Ireland	MN	Mongolia	UA	Ukraine
BI	R Brazil	IL	Israel	MR	Mauritania	UG	Uganda
В	Y Belarus	IS	Iceland	MW	Malawi	US	United States of America
Ç	A Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CI	F Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
C	G Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CI	H Switzerland	KG	Kyrgyzstan	NO	Norway	zw	Zimbabwe
Ci	Côte d'Ivoire	KP	Democratic People's	NZ	New Zealand		
CI	M Cameroon		Republic of Korea	PL	Poland		
CI	N China	KR	Republic of Korea	PT	Portugal		
CI	U Cuba	KZ	Kazakstan	RO	Romania		
C	Z Czech Republic	· LC	Saint Lucia	RU	Russian Federation		
D	E Germany	u	Liechtenstein	SD	Sudan		
Di	K Denmark	LK	Sri Lanka	SE	Sweden		
E	E Estonia	LR	Liberia	SG	Singapore	•	•
l							

#### FLORAL SLEEVE HAVING A DECORATIVE PATTERN

The present application has subject matter which is related to the disclosures of U.S. Patent No. 5,625,979, and U.S. Patent No. 5,572,851. The specifications of each of these patents are hereby incorporated by reference herein in its entirety.

5

10

15

20

## FIELD OF THE INVENTION

This invention generally relates to sleeves, and, more particularly, sleeves used to wrap floral groupings or flower pots containing floral groupings and/or mediums containing floral groupings, and methods of using same.

## BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a side perspective view of a sleeve having a base portion with a decorative pattern having a curved upper boundary and having an upper detachable portion and constructed in accordance with the present invention.

Figure 2 is a perspective view of a potted plant disposed within the sleeve of Figure 1.

Figure 3 is a perspective view of the sleeve and potted plant of Figure 2 after the upper portion of the sleeve has been removed from the base portion of the sleeve.

Figure 4 is a side view of another sleeve constructed in accordance with the present invention.

Figure 5 is a side view of another sleeve constructed in accordance with the present invention.

Figure 6 is a side view of another sleeve constructed in accordance with the present invention.

Figure 7 is a side view of yet another sleeve constructed in accordance with the present invention.

5

10

20

25

Figure 8 is a side view of yet another sleeve constructed in accordance with the present invention.

Figure 9 is a side view of yet another sleeve constructed in accordance with the present invention.

Figure 10 is a side view of yet another sleeve constructed in accordance with the present invention.

Figure 11 is a side view of yet another sleeve constructed in accordance with the present invention.

Figure 12A is a side view of a sleeve constructed in accordance with the present invention and having a decorative pattern having an upper boundary having a crenate or scalloped pattern.

Figure 12B is a side view of a sleeve constructed in accordance with the present invention and having a decorative pattern having an upper boundary having an inverted crenate or inverted scalloped pattern.

Figure 12C is a side view of a sleeve constructed in accordance with the present invention and having a decorative pattern having an upper boundary having a crenulate, toothed, or zig-zag pattern.

WU 99/55200 PCI/US99/08242

Figure 12D is a side view of a sleeve constructed in accordance with the present invention and having a decorative pattern having an upper boundary having a crenelated or rectangular-shaped pattern.

5

10

15

20

25

## DESCRIPTION OF THE PREFERRED EMBODIMENTS

The present invention contemplates in a preferred version a preformed tubular sleeve for covering a pot means having an upper end, a lower end, and an outer peripheral surface. Said preformed sleeve comprises a base portion having an upper end, a lower end, and an interior space. The preformed sleeve may further comprise a detachable upper sleeve portion generally sized to surround and enclose a floral grouping. The upper portion when present may be detachable via perforations, tear strips, weakened areas, or zippers. The upper sleeve portion may have one or more apertures or an extended upper portion for serving as a handle or support device.

The tubular sleeve may form part of a plant package when used in conjunction with a pot assembly disposed within the retaining space of the base portion of the tubular sleeve, the pot assembly having a floral grouping disposed therein, and wherein the pot assembly is substantially surrounded and encompassed by the base portion and the floral grouping is substantially surrounded and encompassed and enclosed by the upper sleeve portion when it forms a part of the preformed sleeve.

3

日とりつりこう・ シ

10

15

20

25

Also, the base portion may comprise a bonding material disposed on an inner portion thereof for bondingly connecting to a pot disposed therein. Or the bonding material may be disposed on an outer portion thereof.

The base portion of the preformed tubular sleeve may be constructed from a first material and the upper portion (where present) constructed from a second material different from the first material. The preformed sleeve may comprise a portion of a plant package which additionally comprises a pot assembly disposed within the sleeve, the pot assembly having a floral grouping disposed therein, and wherein the pot of the pot assembly is substantially surrounded and encompassed by the base portion.

These embodiments and others of the present invention are now described in more detail below. It will be appreciated that the examples provided herein are not intended to limit the scope and extent of the claimed invention but are only intended to exemplify various of the embodiments of the invention contemplated herein.

# The Embodiments and Methods of Use of Figures 1-12D

Shown in Figure 1 and designated therein by the general reference numeral 10 is a flexible preformed sleeve of unitary construction. The sleeve 10 preferably initially comprises a flexible flat collapsed piece of material which is openable in the form of a tube or sleeve. In an alternative embodiment, the sleeve may be formed in an opened frusto-conical configuration. The sleeve 10 is preferably tapered outwardly from the lower end toward

a larger diameter at its upper end. In its flattened state the sleeve 10 has an overall trapezoidal or modified trapezoidal shape, and when opened is substantially frusto-conical to coniform. It will be appreciated, however, that the sleeve 10 may comprise variations on the aforementioned shapes or may comprise significantly altered shapes such as square or rectangular, wherein the sleeve 10 when opened has a cylindrical form, as long as the sleeve 10 functions in accordance with the present invention in the manner described herein.

5

10

.i . ½

15

20

25

The sleeve 10 has an upper end 12, a lower end 14, an outer peripheral surface 16 and in its flattened state has a first side 18 and a second side 20. The sleeve 10 has an opening 22 at the upper end 12 and may be open at the lower end 14 (not shown), or closed with a bottom at the lower end 14. The sleeve 10 also has an inner peripheral surface 24 which, when the sleeve 10 is opened, defines and encompasses an inner retaining space as indicated in When the lower end 14 of the sleeve 10 is closed, a Figure 5. portion of the lower end 14 may be inwardly or outwardly folded to form one or more gussets 26 constructed in a manner well known to one of ordinary skill in the art as shown in Figure 1 for permitting a bottom of an object such as a potted plant to be disposed into the inner retaining space of the lower end 14 of the sleeve 10. Further the lower end 14 may be constructed in the shown in copending U.S. Serial No. 08/606,957, specification of which is hereby incorporated herein in its

entirety. Figure 2 shows a sleeve 10a formed without a gusset in the lower end 14a.

The sleeve 10 is generally frusto-conically shaped, but the sleeve 10 may be, by way of example but not by way of limitation, cylindrical, frusto-conical, a combination of both frusto-conical and cylindrical, or any other shape, as long as the sleeve 10 functions as described herein as noted above. Further, the sleeve 10 may comprise any shape, whether geometric, non-geometric, asymmetrical and/or fanciful as long as it functions in accordance with the present invention. The sleeve 10 may also be equipped with drainage means (e.g., one or more holes) in the base portion or bottom thereof or ventilation holes (not shown) in the base or upper portion, or can be made from permeable or impermeable materials.

5

10

15

20

25

The material from which the sleeve 10 is constructed preferably has a thickness in a range from about 0.1 mils to about 30 mils. Often, the thickness of the sleeve 10 is in a range from about 0.5 mils to about 10 mils. Preferably, the sleeve 10 has a thickness in a range from about 1.0 mil to about 5 mils. More preferably, the sleeve 10 is constructed from a material which is flexible, semi-rigid, rigid, or any combination thereof. The sleeve 10 may be constructed of a single layer of material or a plurality of layers of the same or different types of materials. Any thickness of the material may be utilized as long as the material functions in accordance with the present invention as described herein. The layers of material comprising the sleeve 10

10

15

20

25

may be connected together or laminated or may be separate layers. Such materials used to construct the sleeve 10 are described in U.S. Patent No. 5,111,637 entitled "Method For Wrapping A Floral Grouping" issued to Weder et al., on May 12, 1992, which is hereby incorporated herein by reference. Any thickness of material may be utilized in accordance with the present invention as long as the sleeve 10 may be formed as described herein, and as long as the formed sleeve 10 may contain at least a portion of a pot or potted plant or a floral grouping, as described herein. Additionally, an insulating material such as bubble film, preferable as one of two or more layers, can be utilized in order to provide additional protection for the item, such as the floral grouping, contained therein.

In one embodiment, the sleeve 10 may be constructed from a sheet comprising two polypropylene films. The material comprising the sleeve 10 may be connected together or laminated or may be separate layers. In an alternative embodiment, the sleeve 10 may be constructed from only one of the polypropylene films.

The sleeve 10 is constructed from any suitable material that is capable of being formed into a sleeve and wrapped about a pot and a floral grouping disposed therein. Preferably, the material comprises paper (untreated or treated in any manner), cellophane, metal foil, polymer film, non-polymer film, fabric (woven or nonwoven or synthetic or natural), cardboard, fiber, cloth, burlap, or laminations or combinations thereof.

10

15

20

25

The term "polymer film" means a man-made polymer such as a polypropylene or a naturally occurring polymer such as cellophane. A polymer film is relatively strong and not as subject to tearing (substantially non-tearable), as might be the case with paper or foil.

The material comprising the sleeve 10 may vary in color and as described herein consists of designs or decorative patterns which are printed, etched, and/or embossed thereon using inks or other printing materials. An example of an ink which may be applied to the surface of the material is described in U.S. Patent No. 5,147,706 entitled "Water Based Ink On Foil And/or Synthetic Organic Polymer" issued to Kingman on Sep. 15, 1992 and which is hereby incorporated herein by reference.

In addition, the material may have various colorings, coatings, flocking and/or metallic finishes, or other decorative surface ornamentation applied separately or simultaneously or may be characterized totally or partially by pearlescent, translucent, transparent, iridescent, neon, or the like, qualities. The material may further comprise, or have applied thereto, one or more scents. Each of the above-named characteristics may occur alone or in combination and may be applied to the upper and/or lower surface of the material comprising the sleeve 10. Moreover, portions of the material used in constructing the sleeve 10 may vary in the combination of such characteristics. The material utilized for the sleeve 10 itself may be opaque, translucent, transparent, or partially clear or tinted transparent.

10

15

20

25

The term "floral grouping" as used herein means cut fresh flowers, artificial flowers, a single flower or other fresh and/or artificial plants or other floral materials and may include other secondary plants and/or ornamentation or artificial or natural materials which add to the aesthetics of the overall floral grouping. The floral grouping comprises a bloom or foliage portion and a stem portion. Further, the floral grouping may comprise a growing potted plant having a root portion (not shown) as well. However, it will be appreciated that the floral grouping consist of only a single bloom or only foliage, or a botanical item (not shown), or a propagule (not shown). The term "floral grouping" may be used interchangeably herein with both the terms "floral arrangement" and "potted plant". The term "floral grouping" may also be used interchangeably herein with the terms "botanical item" and/or "propagule."

The term "growing medium" when used herein means any liquid, solid or gaseous material used for plant growth or for the cultivation of propagules, including organic and inorganic materials such as soil, humus, perlite, vermiculite, sand, water, and including the nutrients, fertilizers or hormones or combinations thereof required by the plants or propagules for growth.

The term "botanical item" when used herein means a natural or artificial herbaceous or woody plant, taken singly or in combination. The term "botanical item" also means any portion or portions of natural or artificial herbaceous or woody plants

10

15

20

25

including stems, leaves, flowers, blossoms, buds, blooms, cones, or roots, taken singly or in combination, or in groupings of such portions such as bouquet or floral grouping.

The term "propagule" when used herein means any structure capable of being propagated or acting as an agent of reproduction including seeds, shoots, stems, runners, tubers, plants, leaves, roots or spores.

In accordance with the present invention, a bonding material may optionally be disposed on a portion of the sleeve 10 to attach the sleeve 10 to the pot having the floral grouping therein when such a pot is disposed within the sleeve or to assist in closing or sealing the upper portion of the sleeve 10 or in adhering the sleeve 10 to the pot after the pot has been disposed therein, as will be discussed in further detail below.

It will be understood that the bonding material may be disposed as a strip or block on a surface of the sleeve 10. Further, the bonding material may be disposed as spots of bonding material, or in any other geometric, non-geometric, asymmetric, or fanciful form, and in any pattern including covering either the entire inner peripheral surface and/or outer peripheral surface of the sleeve 10 and/or the pot or pot cover. The bonding material may be covered by a cover or release strip which can be removed prior to the use of the sleeve, pot or pot cover. The bonding material can be applied by means known to those of ordinary skill in their art. One method for disposing a bonding material, in this case an adhesive, is described in U.S. Patent No. 5,111,637

entitled "Method For Wrapping A Floral Grouping" issued to Weder et al., on May 12, 1992, which has been incorporated by reference above.

5

10

1.5

20

25

. P \_ D

The term "bonding material or bonding means" when used herein means an adhesive, frequently a pressure sensitive adhesive, or a When the bonding material is a cohesive, a similar cohesive. cohesive material must be placed on the adjacent surface for bondingly contacting and bondingly engaging with the cohesive The term "bonding material or bonding means" also material. includes materials which are heat sealable and, in this instance, the adjacent portions of the material must be brought into contact and then heat must be applied to effect the seal. "bonding material or bonding means" also includes materials which are sonic sealable and vibratory sealable. The term "bonding material or bonding means" when used herein also means a heat sealing lacquer or hot melt material which may be applied to the material and, in this instance, heat, sound waves, or vibrations, also must be applied to effect the sealing.

Alternatively, a cold seal adhesive may be utilized as the bonding material or means. The cold seal adhesive adheres only to a similar substrate, acting similarly as a cohesive, and binds only to itself. The cold seal adhesive, since it bonds only to a similar substrate, does not cause a residue to build up on equipment, thereby both permitting much more rapid disposition and use of such equipment to form articles and reducing labor costs. Further, since no heat is required to effect the seal, the dwell

10

15

20

25

time, that is, the time for the sheet of material to form and retain the shape of an article, such as a flower pot cover or flower pot, is reduced. A cold seal adhesive binds quickly and easily with minimal pressure, and such a seal is not readily releasable. This characteristic is different from, for example, a pressure sensitive adhesive.

As shown in Figure 1, the sleeve 10 in one embodiment is demarcated into an upper portion 30 and a lower, or base, portion The base portion 32 of the sleeve 10 is generally sized to 32. contain a potted plant. Preferably, the base portion 32 is tapered to fit the shape of a standard pot. The upper portion 30 of the sleeve 10 is sized to substantially surround and enclose a floral grouping contained within the potted plant disposed within the base portion 32 of the sleeve 10. The sleeve 10 is demarcated into the upper portion 30 and the base portion 32 by a detaching element 34 for enabling the detachment of the upper portion 30 of the sleeve 10 from the base portion 32 of the sleeve 10. In the present version, the detaching element 34 is a plurality of horizontallyoriented perforations comprising a horizontal line which extends circumferentially across the outer peripheral surface 16 of the sleeve 10 from the first side 18 to the second side 20. The term "detaching element," or "detaching means" as used generally herein, means any element or means, or combination of elements, or features, such as, but not by way of limitation, perforations, tear strips, zippers, and any other devices or elements of this nature known in the art, or any combination thereof, which enable the

tearing away or detachment of one object from another. Therefore, while perforations are shown and described in detail herein, it will be understood that tear strips, zippers, or any other "detaching elements" known in the art, or any combination thereof, could be substituted therefore and/or used therewith.

5

10

20

25

In a preferred embodiment, as shown in Figure 1, the sleeve 10 has a decorative pattern 36 disposed upon or inherent to the base portion 32. The decorative pattern 36 has a curved upper boundary 38 positioned below the detaching element 34, which in the preferred embodiment is a horizontal line of perforations. decorative pattern 36 may be a solid color, or multicolored print, or may be comprised of a plurality of individual patterns such as asofloral print composed of a pattern of leaves and blossoms. Between the detaching element 34 and the curved upper boundary 38 is a clear zone 40 comprising an unprinted zone which is clear and transparent, and has no printing thereon. The curved upper boundary 38 may comprise a distinct demarcation between the clear zone 40 and the decorative pattern 36, or may comprise less definite boundary (for example, comprising edges of a floral print, but which when viewed from a distance still provides the sleeve 10 with an appearance of having a curved upper boundary 38. decorative pattern 36 may cover all of, or just a portion of, the base portion 32 below the clear zone 40. In a preferred embodiment the curved upper boundary 38 has a plurality of peaks 42 and troughs 44. The peaks 42 are preferably within about 0.0 mm to about 25 mm of the detaching element 34 and the troughs 44 are

generally about 10 mm to about 60 mm below the detaching element 34. These distances are not absolute and the peaks 42 and troughs 44 of the curved upper boundary 38 may be lesser or greater than the distances listed above.

The decorative pattern 34 may be disposed upon or inherent to the entire surface of the base portion 32 below the clear zone 40, or it may be disposed upon only a portion of the surface of the base portion 32.

5

10

15

20

25

Shown in Figure 2 is a potted plant 48 disposed within the sleeve 10. The potted plant 48 comprises a pot 50 which has an upper rim 52 and a plant or floral grouping 54 disposed within the pot 50. When the upper portion 30 of the sleeve 10 is removed (Figure 3), the lower portion 32 is left remaining as a decorative covering 56 about the potted plant 48. Although the decorative covering 48 now has a substantially straight upper edge 58, the decorative covering has the appearance, or illusion, of having a curved upper edge, due to the curved upper boundary 38 of the decorative pattern 36 on the base portion 32 and since the clear zone 40 is clear and transparent, and therefore inconspicuous.

Three other embodiments of the invention are shown in Figures 4-6. Figure 4 shows a sleeve 10a which is exactly the same as sleeve 10 except sleeve 10a has apertures for enabling a plurality of sleeves 10a to be placed on a support device such as a wicket (not shown). Sleeve 10a has an upper portion 30a which is sized to substantially enclose a floral grouping. As shown in Figure 4, sleeve 10a does not have a gusset, but one of ordinary skill in the

art will understand that the sleeve 10a could be manufactured with a gusset in the lower end thereof. Figure 5 shows a sleeve 10b having an upper portion 30b which has apertures 60 for use in supporting the sleeve 10b from a support device. Unlike the upper portion 30a of sleeve 10a, the upper portion 30b of sleeve 10b is not sized to enclose a floral grouping and is intended to be removed from the base portion 32b before the sleeve 10b is placed about a pot as a decorative covering. Further, as shown in Figure 6, sleeve 10c is the same as sleeves 10-10b except it is constructed without a detachable upper portion such that sleeve 10c has a base portion 32c having a substantially straight upper edge 62. In effect, when sleeve 10c is placed as a decorative covering about a pot, it has the same overall appearance as the decorative covering 56 in Figure 3, after the upper portion 30 has been removed from sleeve 10.

5

10

- 15

20

25

Other embodiments of the present invention are shown in Figures 7-11. Shown in Figure 7 is sleeve 10d which is the same as sleeve 10 except sleeve 10d has a lower end 14d which has a curved end 64, rather than a straight end. Sleeve 10d is shown as having a detachable upper portion 30d, but it will be appreciated that sleeve 10d may be constructed having an upper portion similar to sleeves 10a or 10b, or may be constructed without an upper portion similar to sleeve 10c.

Figure 8 shows a sleeve 10e which may be constructed exactly the same as any of sleeves 10-10b or 10d except a closure bonding material 66 is disposed on or near an upper end portion of the

10

15

20

25

upper portion 30e of the sleeve 10e for enabling closure of the upper portion 30e after a potted plant has been disposed within the sleeve 10e.

Figure 9 shows a sleeve 10f having a bonding material 68 disposed upon a portion of the inner surface of a base portion 32f of the sleeve 10f, otherwise the sleeve 10f may be constructed in a manner similar to any of sleeves 10-10e. The bonding material 68 may be used to attach the base portion 32f to a pot disposed therein, or it may be used in forming a crimped portion (not shown) in the base portion 32f after a pot is disposed therein.

Figure 10 shows a sleeve 10g which may be constructed the same as any of sleeves 10-10f, except sleeve 10g has a bonding material 70 on an outer surface of the base portion 32g thereof. The bonding material 70 may be used to form a crimped portion (not shown) in the lower portion 32g.

Figure 11 shows a sleeve 10h having an aperture 72 in an upper end of the upper portion 30h for use as a handle, for enabling the sleeve 10h having a pot disposed therein to be carried. Sleeve 10h may be constructed the same as any of the sleeves described elsewhere herein which have an upper portion sized to enclose a potted plant.

The upper portion 30 of the sleeve 10 may also have an additional vertical detaching element comprising a plurality of vertical perforations (not shown) for facilitating removal of the upper portion 30 and which are disposed more or less vertically therein extending between the detaching element 34 of the sleeve 10

and the upper end 12. The upper portion 30 of the sleeve 10 is separable from the base portion 32 of the sleeve 10 by tearing the upper portion 30 along both the vertical perforations (when present) and the detaching element 34, thereby separating the upper portion 30 from the base portion 32 of the sleeve 10. The base portion 32 of the sleeve 10 remains disposed about the pot forming a decorative cover which substantially surrounds and encompasses the pot of the potted plant.

5

10

15

20

25

It will be understood by a person of ordinary skill in the art that equipment and devices for forming floral sleeves are commercially available, and are well known to a person of ordinary skill in the art. Therefore, further discussion of the construction of the covers described herein is not deemed necessary.

As noted above, any of sleeves 10-10h may have an open or closed lower end. When the lower end is closed, the lower end may have one or more gussets 26 formed therein for allowing expansion of the lower end when an object with a broad lower end such as a pot is disposed therein. In another version of sleeve 10e, the sleeve may comprise a flap positioned at the upper end of the upper portion 30e which can be folded over and sealed with a flap bonding strip to an adjacent portion of the outer peripheral surface of the sleeve near the upper end thereof. Other versions of the sleeve (not shown) may comprise ventilation holes or drainage means (e.g., holes) in the base portion 32 for allowing movement of gases or moisture to and away from the inner space of the sleeve.

As noted above, it will generally be desired to use the sleeves described herein as coverings for a potted plant. As shown in Figure 2, the potted plant comprises a pot having an upper end, a lower end, an outer peripheral surface, and an inner peripheral surface which encompasses an inner space for retaining a floral grouping or plant. The lower end of the pot is closed but may have holes for permitting water drainage. The term "pot" as used herein refers to any type of container used for holding a floral grouping or plant. Examples of pots, used in accordance with the present invention include, but not by way of limitation, clay pots, wooden pots, plastic pots, pots made from natural mad/or synthetic fibers, or any combination thereof. The pot is adapted to receive a floral grouping in the retaining space. The floral grouping may be disposed within the pot along with a suitable growing medium described in further detail below, or other retaining medium, such as a floral foam. It will also be understood that the floral grouping, and any appropriate growing medium or other retaining medium, may be disposed in the sleeve without a pot.

5

10

15

20

25

In an alternative version of the invention, a bonding material may be disposed on the outer surface of the pot while the sleeve 10-10h is free of a bonding material. In this case, when the pot is disposed into the open sleeve, the bonding material on the outer peripheral surface of the pot engages a portion of the inner peripheral surface of the sleeve causing the sleeve to be bondingly connected to a portion of the outer surface of the pot.

In yet another version of the method of the present invention, a bonding material may be disposed on the both outer surface of the pot and the inner peripheral surface of any of the sleeves mentioned herein. In such a case, preferably the bonding material both of the pot and the sleeve is a cohesive which allows bonding to a surface covered with the cohesive but not to dissimilar surfaces.

5

10

15

20

25

As shown in Figures 1-11, the decorative pattern preferably comprises a curved upper boundary. However, the configuration of the upper boundary of the decorative pattern is not necessarily meant to be limited to a "curved" design and may be constructed in any number of other "non-linear" patterns, several being shown in Figures 12A-12D. For example, Figure 12A shows a sleeve 10i having an upper boundary 38i having a crenate or scalloped pattern. Figure 12B shows sleeve 10j having an upper boundary 38j having a crenate or scalloped pattern which is inverted. Figure 12C shows a sleeve 10k having an upper boundary 38k having a crenulate toothed or zig-zag pattern. Figure 12D shows a sleeve 101 having an upper boundary 381 having a crenelated or rectangular-shaped One of ordinary skill in the art will understand these are but a few of the patterns that the perforations may form and one of ordinary skill could contemplate many other suitable patterns.

The sleeves described herein may be formed by intermittently advancing two separate webs, one or two webs preformed in the form of a tube, or a single web folded double and sealing the

10

15

20

25

longitudinal sides and bottom of the two facing panels then cutting the sleeve thus formed from the webs or web. Machines which can form sleeves from such single webs or pairs of webs are well within the knowledge of one of ordinary skill in the art.

It should also be noted that for all versions of sleeves described above which have a bonding material thereon, it may be desirable to have a release material or cover strip covering the adhesive or cohesive bonding material disposed on any portion of the sleeve for preventing the bonding material from bonding to another surface until the desired time. Further in each of the cases described herein wherein a sleeve is applied to a pot or a covered pot, the sleeve may be applied thereto either by depositing the pot or covered pot downwardly into the open retaining space of the sleeve, or the sleeve may be brought upwardly about the pot or covered pot from below the pot or a covered pot.

It should be further noted that various features of the versions of the present invention such as closure bonding areas, support apertures, handles or handle apertures, additional perforations, drainage means, ventilation holes, combinations of material may be used alone or in combination as elements of any of the embodiments described above herein.

Changes may be made in the construction and the operation of the various components, elements and assemblies described herein or in the steps or the sequence of steps of the methods described herein without departing from the spirit and scope of the invention as defined in the following claims.

10

What is claimed is:

1. A tubular sleeve initially having a flattened state, comprising:

a base portion sized to contain a pot;

an upper portion detachable from the base portion via a horizontal line of perforations; and

- a decorative pattern disposed on or inherent to at least a portion of the base portion, with the decorative pattern having a curved upper boundary positioned below the horizontal line of perforations, and the base portion having a clear zone between the horizontal line of perforations and the curved upper boundary of the decorative pattern, such that when the upper portion is detached from the base portion, the base portion has the appearance of having a curved upper end.
- 2. The tubular sleeve of claim 1 wherein the upper portion is sized to substantially surround and enclose a floral grouping disposed within a pot.
- 3. The tubular sleeve of claims 1 or 2 wherein the upper portion has apertures for suspending the tubular sleeve from a support means.

4. The tubular sleeve of claims 1,2 or 3 wherein the base portion further comprises a tapered shape for conforming to the shape of the pot.

- 5. The tubular sleeve of any one of the preceding claims wherein the curved upper boundary of the decorative pattern comprises a plurality of peaks and troughs wherein the peaks are generally within 0 mm to about 25 mm of the horizontal line of perforations and the troughs are generally about 10 mm to about 60 mm below the horizontal line of perforations.
- 6. The tubular sleeve of any one of the preceding claims wherein the base portion has a bottom end having a gusset therein.
- 7. A tubular sleeve for decoratively covering a pot comprising:

5

10

a base sized to contain a pot, the base having a substantially horizontal upper edge, and a decorative pattern disposed on or inherent to at least a portion of the base portion, with the decorative pattern having a curved upper boundary positioned below the upper edge of the base, and the base having a clear zone between the upper edge and the curved upper boundary of the decorative

pattern, such that the base has the appearance of having a curved upper end.

1 1 1/1/10/27/10/24/24

- 8. The tubular sleeve of claim 7 wherein the base further comprises a tapered shape for conforming to the shape of the pot.
- 9. The tubular sleeve of claims 7 or 8 wherein the base has a bottom end having a gusset therein.
- 10. The tubular sleeve of claims 7-9 wherein the curved upper boundary of the decorative pattern comprises a plurality of peaks and troughs wherein the peaks are generally within 0 mm to about 25 mm of the upper edge of the base and the troughs are generally about 10 mm to about 60 mm below the upper edge of the base.
  - 11. A plant package, comprising:

5

10

- a tubular sleeve comprising:
  - a base portion sized to contain a pot;
    - an upper portion detachable from the base portion via a horizontal line of perforations, and
    - a decorative pattern disposed on or inherent to at least a portion of the base portion, with the decorative pattern having a curved upper boundary positioned below the horizontal line of perforations, and the base portion having a

20

clear zone between the horizontal line of perforations and the curved upper boundary of the decorative pattern; and

a potted plant comprising a pot having an upper rim and a floral grouping having an upper portion and a lower portion, the potted plant disposed within the tubular sleeve and positioned therein such that the horizontal line of perforations and at least a portion of the curved upper boundary of the decorative pattern are positioned above the upper rim of the pot; and

wherein when the upper portion is detached from the base portion, the base portion has the appearance of having a curved upper end.

- 12. The plant package of claim 11 wherein the upper portion of the tubular sleeve is sized to substantially surround and enclose a floral grouping disposed within the pot.
- 13. The plant package of claims 11 or 12 wherein the base portion further comprises a tapered shape for substantially conforming to the shape of the pot.
- 14. The plant package of any one of claims 11-13 wherein the curved upper boundary of the decorative pattern comprises a

9YU 77334U0 PCT/US99/08242

plurality of peaks and troughs wherein the peaks are generally within 0 mm to about

- 25 mm of the horizontal line of perforations and the troughs are generally about 10 mm to about 60 mm below the horizontal line of perforations.
- 15. The plant package of any one of claims 11-14 wherein at least a portion of the curved upper boundary of the decorative pattern is positioned near the upper rim of the potted plant.
- 16. The plant package of any one of claims 11-15 wherein the curved upper boundary of the decorative pattern encircles a portion of the lower portion of the floral grouping.

## 17. A plant package, comprising:

a tubular sleeve comprising:

a base sized to contain a pot, the base having a substantially horizontal upper edge, and a decorative pattern disposed on or inherent to at least a portion of the base portion, with the decorative pattern having a curved upper boundary positioned below the upper edge of the base, and the base having a clear zone between the upper edge and the curved upper boundary of the decorative pattern; and

10

5

curved upper end.

- 18. The plant package of claim 17 wherein the base of the sleeve further comprises a tapered shape for substantially conforming to the shape of the pot.
- 19. The plant package of claims 17 or 18 wherein at least a portion of the curved upper boundary of the decorative pattern is positioned near the upper rim of the potted plant.
- 20. The plant package of any one of claims 17-19 wherein the curved upper boundary of the decorative pattern encircles a portion of the lower portion of the floral grouping.
- 21. The plant package of any one of claims 17-20 wherein the curved upper boundary of the decorative pattern comprises a plurality of peaks and troughs wherein the peaks are generally within 0 mm to about

25 mm of the upper edge of the base and the troughs are generally about 10 mm to about 60 mm below the upper edge of the base.

\*\*\* - ///

5

10

15

20

22. A method of covering a pot having an upper rim, comprising:

providing a tubular sleeve initially having a flattened state, wherein the tubular sleeve comprises:

a base portion sized to contain a pot and an upper portion detachable from the base portion via a horizontal line of perforations, and

エイシンノノノリング

a decorative pattern disposed on or inherent to at least a portion of the base portion, with the decorative pattern having a curved upper boundary positioned below the horizontal line of perforations, and the base portion having a clear zone between the horizontal line of perforations and the curved upper boundary of the decorative pattern; and

disposing the pot within the base portion of the tubular sleeve wherein the horizontal line of perforations and the curved upper boundary of the decorative pattern are positioned above the upper rim of the pot; and

wherein when the upper portion is detached from the base portion, the base portion has the appearance of having a curved upper end.

23. The method of claim 22 wherein the upper portion of the tubular sleeve is sized to substantially surround and enclose a floral grouping disposed within the pot, the floral grouping having an upper portion and a lower portion.

- 24. The method of claims 22 or 23 wherein the base portion of the tubular sleeve is tapered for conforming to the shape of the pot.
- 25. The method of any one of claims 22-24 wherein the curved upper boundary of the decorative pattern comprises a plurality of peaks and troughs wherein the peaks are generally within 0 mm to about 25 mm of the horizontal line of perforations and the troughs are generally about 10 mm to about 60 mm below the horizontal line of perforations.

5

- 26. The method of any one of claims 22-25 wherein the base portion of the tubular sleeve has a bottom end having a gusset therein.
- 27. The method of any one of claims 22-26 further comprising the step of removing the upper portion via the horizontal line of perforations leaving the base portion about the pot such that the base portion has the appearance of having a curved upper end.

- 28. The method of any one of claims 22-27 wherein at least a portion of the curved upper boundary of the decorative pattern is positioned near the upper rim of the pot.
- 29. The method of any one of claims 22-28 wherein the curved upper boundary of the decorative pattern encircles a portion of the lower portion of a floral grouping disposed within the pot.
- 30. A method of covering a pot having an upper rim, comprising:

10

15

providing a tubular sleeve initially having a flattened state, wherein the tubular sleeve comprises:

a base sized to contain a pot, the base having a substantially straight upper edge, and a decorative pattern disposed on or inherent to at least a portion of the base portion, with the decorative pattern having a curved upper boundary positioned below the upper edge of the base, and the base having a clear zone between the upper edge and the curved upper boundary of the decorative pattern; and

disposing the pot within the base of the tubular sleeve,
wherein the upper edge of the base and the curved
upper boundary of the decorative pattern are
positioned above the upper rim of the pot; and

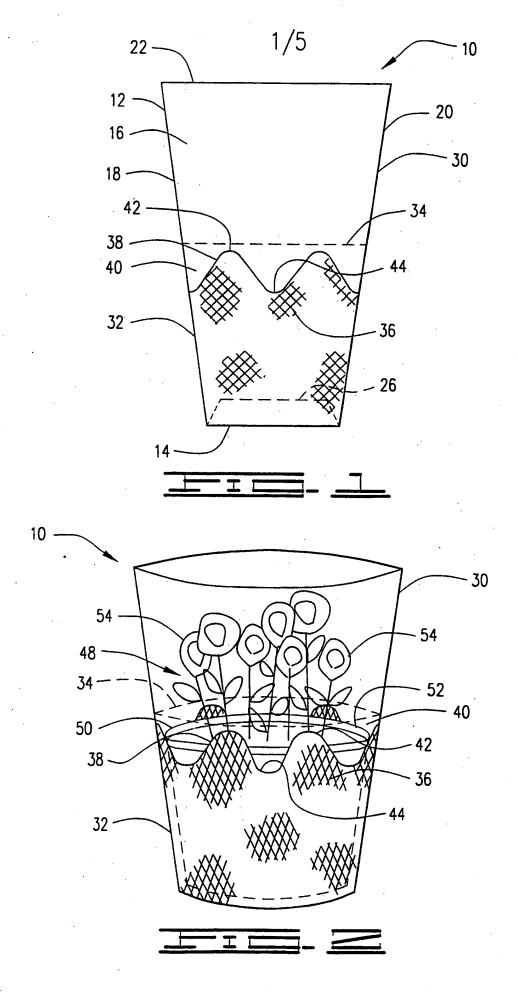
wherein the base has the appearance of having a curved upper end.

- 31. The method of claim 30 wherein the base of the tubular sleeve is tapered for conforming to the shape of the pot.
- 32. The method of claims 30 or 31 wherein the base of the tubular sleeve has a bottom end having a gusset therein.
- 33. The method of any one of claims 30-32 wherein at least a portion of the curved upper boundary of the decorative pattern is positioned near the upper rim of the pot.
- 34. The method of any one of claims 30-33 wherein the curved upper boundary of the decorative pattern encircles a portion of the lower portion of a floral grouping disposed within the pot.

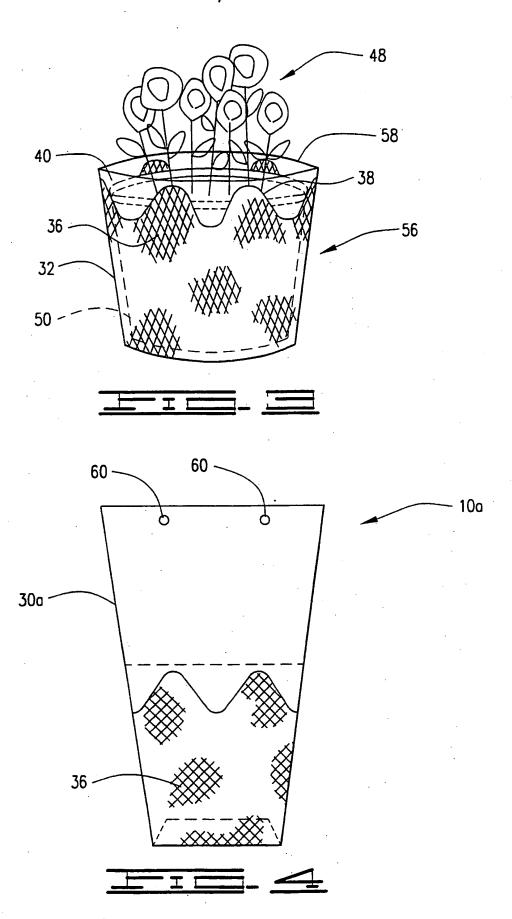
5

10

35. The method of any one of claims 30-34 wherein the curved upper boundary of the decorative pattern comprises a plurality of peaks and troughs wherein the peaks are generally within 0 mm to about 25 mm of the upper edge of the base and the troughs are generally about 10 mm to about 60 mm below the upper edge of the base.

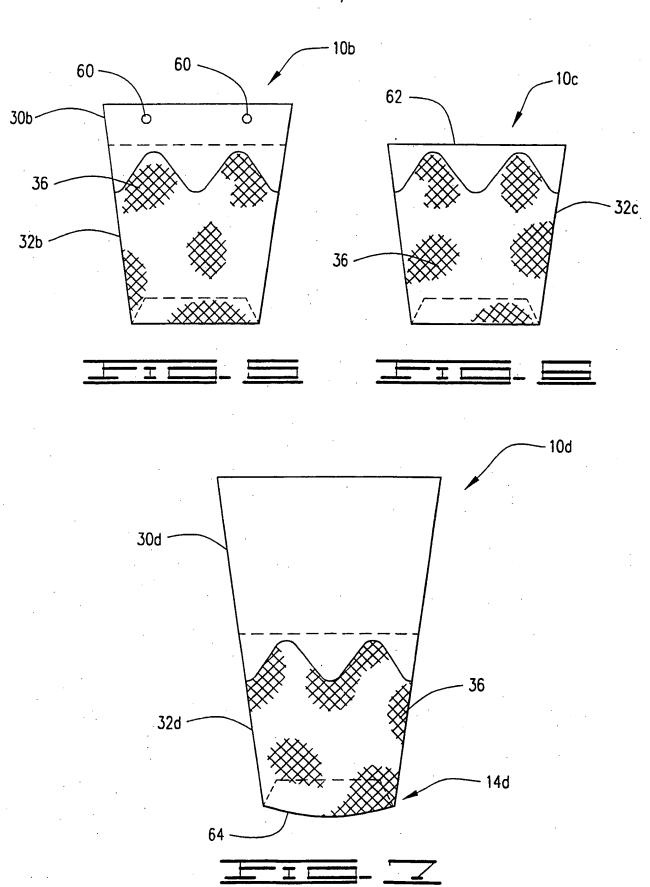


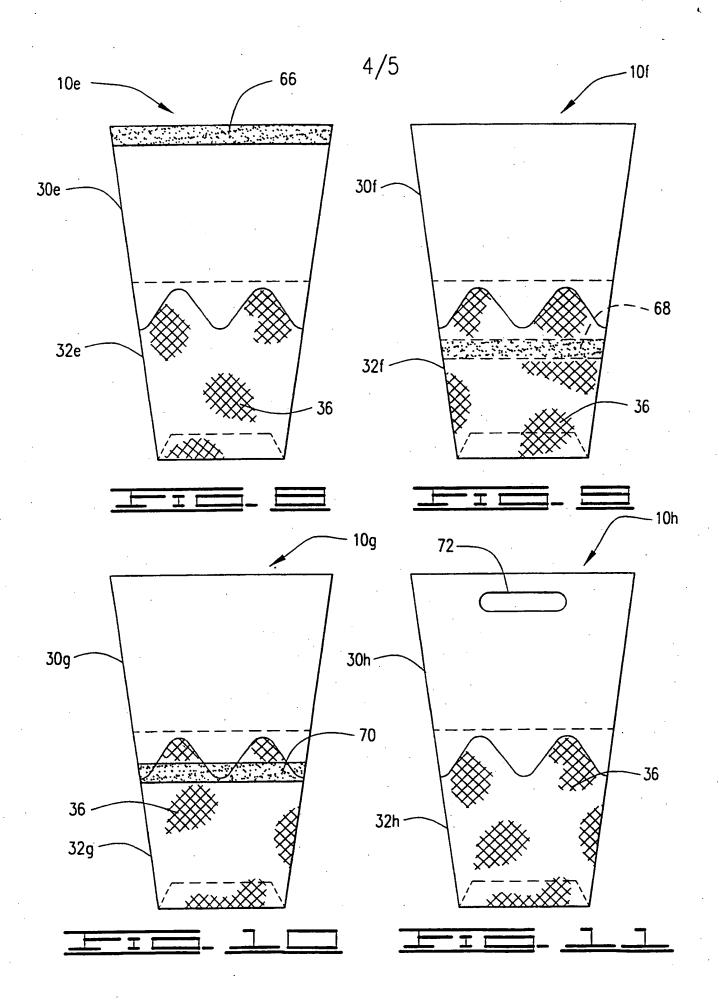
SUBSTITUTE SHEET (RULE 26)



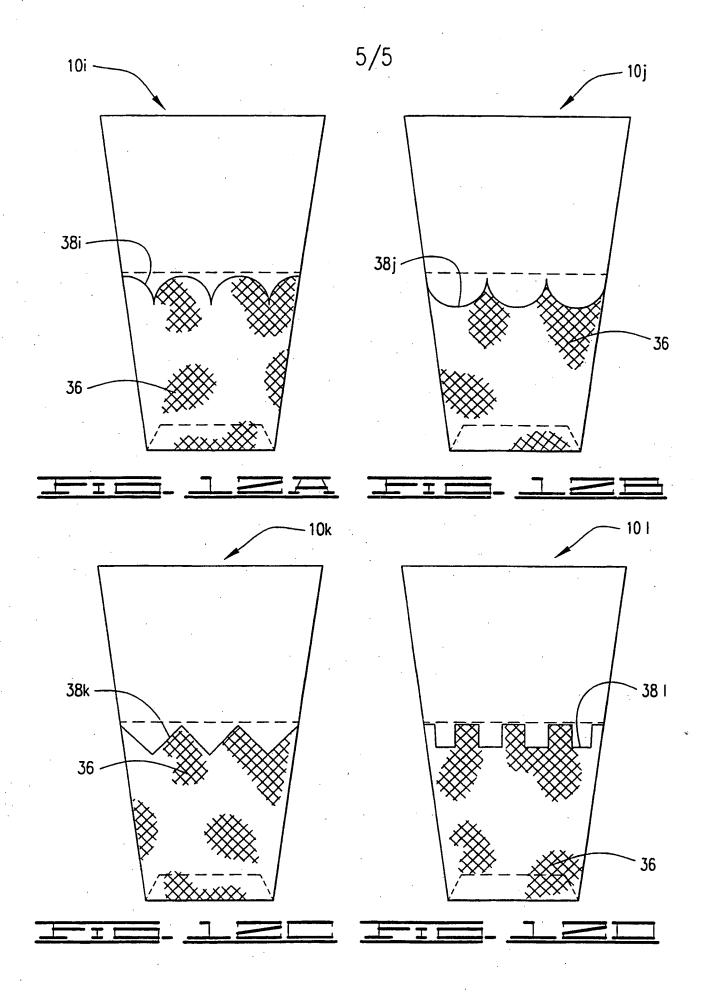
SUBSTITUTE SHEET (RULE 26)

3/5





**SUBSTITUTE SHEET (RULE 26)** 



#### A. CLASSIFICATION OF SUBJECT MATTER IPC 6 A47G7/08 B651 B65D85/50 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 6 A47G B65D Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages Category ' 7-9 US 5 388 695 A (GILBERT) X 17-20,14 February 1995 (1995-02-14) 30-34 1,11,22 column 12, line 58 - line 67; figure 2 Α 7-9. US 5 647 168 A (GILBERT) X 17-20. 15 July 1997 (1997-07-15) 30-34 1,11,22 figures A 1,7,11, US 5 720 152 A (WEDER) Α 17,22,30 24 February 1998 (1998-02-24) column 12, line 51 - line 57 Patent family members are listed in annex. Further documents are listed in the continuation of box C. "T" later document published after the international filing date Special categories of cited documents: or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance invention earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date involve an inventive step when the document is taken alone document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docucitation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. document published prior to the international filing date but "&" document member of the same patent family later than the priority date claimed Date of mailing of the international search report Date of the actual completion of the international search 11/08/1999 4 August 1999 **Authorized officer** Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ni, Beugeling, G.L.H. Fax: (+31-70) 340-3016

1

## Information on patent family members

PCT/US 99/08242

Patent document cited in search report	п	Publication date		Patent family member(s)	Publication date
US 5388695	A	14-02-1995	CA US US US	2149494 A,C 5496252 A 5647168 A 5857952 A	24-11-1995 05-03-1996 15-07-1997 12-01-1999
US 5647168	A	15-07-1997	US US CA US CA	5496252 A 5388695 A 2198665 A 5857952 A 2149494 A,C	05-03-1996 14-02-1995 04-09-1997 12-01-1999 24-11-1996
US 5720152	A	24-02-1998	US US US US US	5661951 A 5839255 A 5720151 A 5720155 A 5727363 A	02-09-1997 24-11-1998 24-02-1998 24-02-1998 17-03-1998

THIS PAGE BLANK (USPTO)

# This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

# **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:				
□ BLACK BORDERS				
☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES				
☐ FADED TEXT OR DRAWING				
☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING				
☐ SKEWED/SLANTED IMAGES				
☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS				
☐ GRAY SCALE DOCUMENTS				
☐ LINES OR MARKS ON ORIGINAL DOCUMENT				
☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY				

# IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

THIS PAGE BLANK (USPTO)